ASEYEV, D.D.; KOSITSKIY, G.I.; STRIBUTS, S.M.

Study of the respiratory function in surgery for pulmonary tuberculosis. Probl.tub. 34 no.3:55-63 My-Je '56. (MLRA 9:11)

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo insituta tuberkuleza Ministerstva zdravookhraneniya RSFSR (dir. V.F.Cheryshev, zam. dir. po nauchnoy chasti - prof. D.D.Aseyev)
(RESPIRATION, physiol.
funct. in surg. of pulm. tuberc.)
(TUBERCULOSIS, pulmonary, surg.
resp. funct. in)

ASEYEV, D.D., professor; GUR'YEVA, I.G.

On the 60th birthday of Professor Aleksandr Nikolaevich
Voznesenskii. Vest.oto-rin. 19 no.2:132-133 Mr-Ap '57.
(MLRA 10:6)
(VOZNESENSKII, ALEKSANDR NIKOLAEVICH, 1897-)

ASEYEV, D.D., professor

Organization of the All-Russian Medical Society of Phthisiologists.
Probl.tub.35 no.2:118-120 '57. (MLRA 10:6)

1. Predsedatel' Vserossiyskogo nauchno-meditsinskogo obshchestva ftiziatorov.
(TUBERCULOSIS)

ASEYEV, D.D., professor

"Pneumoperitoneum in pulmonary tuberculosis" by I.A.Shaklein.
Reviewed by D.D.Aseev. Probl.tub. 35 no.3:116-119 '57. (MLRA 10:10)
(TUBERCULOSIS) (PNEUMOPERITONEUM, ARTIFICIAL)
(SHAKLEIN, I.A.)

ASEYEV, D.D., prof.

Pneumothorax in therapy combined with antibacterial preparations.
Probl. tub. 35 no.6:17-23 '57. (MIRA 12:1)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta tuberkuleza Ministerstva zdravookhraneniya RSFSR.
(PNEUMOTHORAX, ARTIFICIAL
adjuvant, bacteriostatics (Rus))

ASEYEV, D.D. prof., SERGEYEV, I.S., kand.med.nauk

Work of the All-Russian Society of Phthisiologists. Zdrav.Ros.Fed.
2 no.10:35-38 O'58 (MIRA 11:10)
(TUBERCULOSIS--SOCIETIES)

ASEYEV, D.D., prof.

Materials on detecting drug-resistant Mycobacterium tuberculosis in the sputum of patients with chronic fibrous cavernous processes in the lungs [with summary in French]. Probl.tub. 36 no.4:14-20 '58 (MIRA 11:7)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta tuberkuleza Ministerstva zdravookhraneniya RSFSR (dir. V.F. Chernyshev, zam. dir. po nauchnoy chasti - prof. D.D. Aseyev)
(TUBERCULOSIS, PULMONARY,
drug ther., detection of resist. bact. in sputum (Rus))

ASEYEV, D.D. , prof.

"Pneumonectomy and pulmonary resection in tuberculosis" by N.M. Amosov. Reviewed by D.D. Aseev. Probl.tub. 36 no.6:108-110 '58 (MIRA 11:10)

(LUNGS--SURGERY)
(TUBERCULOSIS)
(AMOSOV, N.M.)

ASEYEV, D.D., prof.

Fortieth anniversary of the first Soviet tuberculosis institute. Probl.tub. 36 no.7:12-20 '58. (MIRA 12:8)
(TUBERCULOSIS RESEARCH)

ASEYEV, D.D., prof., otv.red.; GARVEY, N.N., red.; BURAKOV, S.Ye., tekhn.red.

[Antibacterial therapy under experimental conditions and in the clinical aspects of tuberculosis] Antibakterial'naia terapiia v eksperimente i klinike tuberkuleza. Otvet.red.D.D.Aseev. Moskva, 1959. 380 p. (MIRA 14:1)

1. Moscow. Moskovskiy nauchno-issledovatel'skiy institut tuberkuleza.

(TUBERCULOSIS)

KOSITSKIY, G.I.; ASEYEV, D.D.; PLOTITSYNA, T.G.; VYSOKOVA, T.M.; AMIANTOVA-FILIPPOVA, I.S.; FEDOTOVA, Z.N.; SEREZHNIKOVA, S.F.

Respiratory disorders with signs of tuberculous intoxication.
Probl.tub. 37 no.3:27-35 '59.
(MIRA 12:6)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta tuberkuleza Ministerstva zdravookhraneniya RSFSR (dir.V.F.Chernyshev).
(TUBERCULOSIS, PULMONARY, compl.
resp. disord. in toxic stages (Rus))

ASEYEV, D.D., prof.; KLEBANOVA, A.A., kand.biolog.nauk; UGRYUMOV, B.P., prof.; GUR'YEVA, I.G., kand.med.nauk

Clinical and bacteriological parallels in antibacterial treatment. Probl.tub. 37 no.4:16-23 '59. (MIRA 12:10)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta tuberkuleza Ministerstva zdravookhraneniya RSFSR (dir. - kand.med. nauk V.F.Chernyshev, zam.direktora po nauchnoy chasti - prof. D.D.Aseyev).

(TUBERCULOSIS, ther.
bacteriol. & clin. parallels in antibact.ther.
(Rus))

ASEYEV, D.D., prof.; KOROVINA, Yu.P., kand.med.nauk

"Antibacterial therapy in tuberculosis." Reviewed by D.D.Aseev, IU.P.Korovina. Probl.tub. 37 no.5:106-108 '59.

(TUBERCULOSIS) (MIRA 12:10)

ASEYEV, D.D., prof. (Moskva)

Present status and immediate problems in the field of the epidemiology, prevention, clinical aspects and therapy cavernous pulmonary tuberculosis in the RSFSR. Sov. med. 24 no. 5:131-138 My '60.

(TUBERCULOSIS) (MIRA 13:10)

ASEYEV, D.D.; GUR'YEVA, I.G.

Dynamics of double medicinal resistance of Mycobacterium tuberculosis in patients with cavernous pulmonary tuberculosis. Probl.tub. 38 no.1:28-37 '60. (MIRA 13:10)
(STREPTOMYCIN) (ISONICOTINIC ACID) (TUBERCULOSIS)

ASEYEV, D.D., prof. (Moskva)

Contemporary status and immediate problems in the field of epidemiology, prophylaxis, clinical aspects and treatment of patients with cavernous tuberculosis of the lungs in the R.S.R.S.R. Probl. tub. 38 no.2:15-23 '60. (MIRA 13:11)

(TUBERCULOSIS)

ASEYEV, D.D., prof.; AL'TSHULER, N.S., kand.med.nauk; ZAVELEVA, F.D., kand.med.nauk

Experience with a total examination of the population of the city of Klin. Probl.tub. 38 no.8:16-23 '60. (MIRA 14:1)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta tuberkuleza (dir. V.F. Chernyshev, zam. dir. po nauchnoy chasti prof. D.D. Aseyev).

(KLIN—TUBERCULOSIS—DIAGNOSIS)

ASEYEV, D.D., prof.; GINZBURG, Ye.A., kand.med.nauk; ZHUKOVA, M.P.; LACHINYAN, S.R.

Classification of dispensary outpatients. Probl.tub. no.4:3-6 '61. (MIRA 14:12)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta tuberkuleza Ministerstva zdravookhraneniya RSFSR (dir. - kand.med.nauk V.F. Chernyshev, zam. dir. po nauchnoy chasti - prof. D.D. Aseyev).
(TUBERCULOSIS)

ASEYEV, D.D.; KOROVINA, Yu.P.; ODNOLETKOVA, Ye.F.; TONITROVA, N.S.;
TIKHOMIROVA, Ye.A.

Differential diagnosis of pleuropneumosclerosis of tuberculous and other etiology. Probl.tub. no.5:11-20 '61. (MIRA 15:1)

1. Iz diagnosticheskogo otdeleniya (zav. - prof. D.D. Aseyev) Moskovskogo nauchno-issledovatel'skogo instituta tuberkuleza Ministerstva zdravookhraneniya RSFSR (dir. V.F. Chernyshev, zam. dir. po nauchnoy chasti - prof. D.D. Aseyev).
(LUNGS--DISEASES) (DIAGNOSIS, DIFFERENTIAL)

ASEYEV, D. D., prof.; LACHINYAN, S. R., kand. med. nauk

Treatment of tuberculosis with cycloserine. Probl. tub. no.7:20-27 '61.
(MIRA 14:12)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta tuberkuleza Ministerstva zdravookhraneniya RSFSR (dir. V. F. Chernyshev, zam. direktora po nauchnoy chasti - prof. D. D. Aseyev)

(CYCLOSERINE) (TUBERCULOSIS)

ASEYEV, D.D., prof.; LACHINYAN, S.R., kand.med.nauk

Work of the Committee on Tuberculosis of the Medical Council of the Ministry of Public Health of the R.S.F.S.R. Biul.Uch. med. sov. 2 no.3:27-29 My-Je '61. (MIRA 14:10)
(TUBERCULOSIS RESEARCH)

SHEBANOV, F.V., prof., red.; ASEYEV, D.D., prof., red.; YASHCHENKO, T.N., red.; ROZANOVA, O.A., red.; BASHMAKOV, G.M., tekhn. red.

[Present-day problems of tuberculosis]Sovremennye problemy tuberkuleza. Moskva, Medgiz, 1962. 355 p. (MIRA 16:1)

1. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Shebanov).

(TUBERCULOSIS)

ASEYEV, D. D., prof.; NOSKOVA, G. P. (Moskva)

General data on the effectiveness of artificial pneumothorax applied in combination with antibacterial preparations. Probl. tub. 40 no.5:16-21 '62. (MIRA 15:7)

(PNEUMOTHORAX) (TUBERCULOSIS)

ASEYEV, D.D., prof.; AL'TSHULER, N.S., kand.med.nauk

Prevention of tuberculosis at the present stage. Zdrav.Ros. Feder. 7 no.3:15-18 Mr '63. (MIRA 16:3)

1. Iz Moskovskogo nauchni-issledovatel'skogo instituta tuberkuleza Ministerstva zdravookhraneniya RSFSR (dir. T.P. Mochalova).
(TUBERCULOSIS---PREVENTION)

ASEYEV, D.D., prof. (Moskva)

Role of a therapeutic pneumothorax in the treatment of patients with destructive forms of pulmonary tuberculosis. Probl. tuberk. 41 no.2:8-12 '63 (MIRA 17:2)

ASEYEV, D.D., prof.; AL'TSHULER, N.S., kand.med.nauk; SAFONOV-CHABOVSKIY, M.G.; VINOGRADOVA, R.G., kand.med.nauk

Clinical recovery of adult pulmonary tuberculosis patients. Probl. tub. 41 no.10:15-21 '63. (MIRA 17:9)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta tuberkuleza (dir. - kand.med.nauk T.P.Mochalova, zamestitel' direktora po nauchnoy chasti-prof. D.D.Aseyev) Ministerstva zdravookhraneniya RSFSR.

ASEYEV, D.D., prof.; SAVONICHEVA, I.P.

Activity of the board of the All-Union and local scientific medical societies of phthisiologists of the Russian Federation, 1959-1962. Probl. tub. 41 no.11:90-92 '63. (MIRA 17:9)

1. Predsedatel' Vserossiyskogo obshchestva ftiziatrov (for Aseyev).
2. Uchenyy sektretar' Vserossiyskogo obshchestva ftiziatrov (for Savonicheva).

ASEYEV, D.D., prof. (Moskva)

Chemotherapy regimen for patients with Mycobacterium tuberculosis resistant to the basic antibacterial preparations. Probl. tub. no.4:18-22 '64. (MIRA 18:11)

ASEYEV, D.D., prof.; PLOTITSYNA, T.G., kand.biol.nauk; VYSOKOVA, T.M., kand.med.nauk; LITOVCHENKO, O.V., kand.med.nauk

Examination of respiratory function, blood circulation and thermoregulation in patients with mild forms of pulmonary tuberculosis. Probl. tub. 42 no.12:14-21 '64. (MIRA 18:8)

1. Moskovskiy nauchno-issledovatel'skiy institut tuberkuleza (direktor - kand.med.nauk T.P.Mochalova, zam. direktora po nauchnoy chasti - prof. D.D.Aseyev) Ministerstva zdravookhraneniya RSFSR, Moskva.

ASEYEV, G. [Aseeu, H.]

Varicose veins. Rab.i sial. 36 no.8:3 of cover Ag '60.
(MIRA 13:10)

(VARIX)

ASEYEV, G., vrach

Prevent radiculitis. Sov.shakht. 10 no.9:44-45 S '61. (MIRA 14:8)
(Coal miners—Diseases and hygiene)

ASEYEV, Georgiy Danilovich; PANKRASHOV, A.P., red.; POD"EL'SKAYA, K.M., tekhn. red.

[Build quickly, solidly, economically; problems of the development of construction in the Karelian A.S.S.R.]Stroit' bystro, prochno, ekonomno; voprosy razvitiia stroitel'stva v Karel'skoi ASSR. Petrozavodsk, Gos.izd-vo Karel'skoi ASSR, 1962. 154 p. (MIRA 15:11)

(Karelia—Construction industry)

Aseyev, G. G.

120-6-19/36

AUTHORS: Safronov, B.G., Azovskiy, Yu.S., and Aseyev, G.G.

TITLE: A Mass Spectrometric Ion Source with Surface Ionization. (Mass-spektrometricheskiy istochnik ionov s poverkhnostnoy ionizatsiyey)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1957, No.6, pp. 80 - 82 (USSR).

ABSTRACT: Ion sources using the phenomenon of surface ionisation have a number of advantages over thermionic sources. One of the major disadvantages of the surface ionisation type of source is the loss of matter by evaporation since the surfaces lose not only ions but also neutral molecules in consequence of which the isotopic composition is affected (Ref.10). A source employing two filaments was described in Ref.1 in 1953. On one of the filaments was deposited a substance under investigation (this filament acted as a molecular beam source) while the other filament could be heated up to 2 000 $^{\circ}$C and served as an ioniser. This system was more effective than the one-filament system, but the matter loss was still considerable. The latter disadvantage is removed in the new source now described. In the present source, the ionising filament is surrounded by a cylindrical tube emitting vapour of the substance. The tube had a slit on it through which the ions can be emitted. The substance under

Card1/2

120-6-19/56

Mass Spectrometric Ion Source with Surface Ionization.

investigation is deposited on the inner surface of the tube. When the central filament is heated (by a current produced by an accumulator) the tube surrounding it becomes hot, the coating slowly evaporates, and its molecules dissociate into atoms on the hot filament. The atoms are, in turn, ionised and then drawn out through the slit by an accelerating field. The emitted ion beam can then be analysed according to particle mass. Substances of the order of 5×10^{-7} g have been detected, using such a source. A similar device has been described by Hintenberger and Lang (Ref.9).
There are 2 diagrams, 1 table and 10 references, 2 of which are Slavic.

ASSOCIATION: Physico-technical Institute Ac.Sc. USSR.
(Fiziko-tekhnicheskiy Institut AN SSSR)

SUBMITTED: April 5, 1957.

AVAILABLE: Library of Congress

Card 2/2

SINEL'NIKOV, K.D., akademik; SAFRONOV, B.G.; ASEYEV, G.G.; AZOVSKIY, Yu.S.

Separation of isotopes while atomic beams pass through ionization space. Dokl. AN SSSR 115 no.1:80-83 Jl-Ag '57. (MIRA 10:11)

1. Fiziko-tekhnicheskiy institut AN USSR. 2. AN USSR (for Sinel'nikov). (Isotopes) (Ion beams)

Aseyev G. G.

AUTHORS: Sinel'nikov, K. D., Ivanov, V. Ye., Safronov, B. G., Azovskiy, Yu. S., Aseyev, G. G. 56-2-9/51

TITLE: The Separation of Isotopes in a Non-Steady Molecular Flow (Razdeleniye izotopov pri nestatsionarnom molekulyarnom techenii)

PERIODICAL: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1958, Vol 34, Nr 2, pp 327-330 (USSR)

ABSTRACT: In the non-steady molecular flow of mercury vapor a change of the content of isotopes in the flow is observed. The scheme of the measuring arrangement is shown by a diagram. As material served mercury which was in a steel ampoule and could be separated from the system by means of a valve. The content of mercury isotopes was measured by means of the one-jet method for the lightest and for the heaviest isotope, and from these measurements $\beta = I_{198}/I_{204}$ was calculated. The standard ratio β_0 does not change within 2 days. The just discussed measurements were carried out by means of an iron tube and analogous measurements were then carried out by means of a glass tube and a copper tube. The results

Card 1/3

The Separation of Isotopes in a Non-Steady Molecular Flow 65-2-9/51

obtained by the glass-and the iron tube are shown in a diagram. The mercury flow is enriched with the lighter isotope immediately after its appearance and it takes about 8 hours to return again to the standard composition. The desorbed mercury is enriched with the heavy isotope. The time necessary for the formation of the steady flow as well as for the standard-like isotope composition decreases at $T = 29o^{o}C$. For a glass tube at $T = 2o^{o}C$ this time is one tenth of that of an iron tube. Another diagram shows the results of measurements of the flow as well as of the isotope composition in a copper tube at $T = 2o^{o}C$. The course of the curves coincides qualitatively for copper and iron. The solution of the absorption problem found by P. Clausing (reference 1) coincides well with the experimental curve, which speaks in favor of the applicability of such calculations for the flow of mercury vapors through a glass tube. The analogous calculations for a copper tube proved the impossibility of the description of the change of flow and of the composition of isotopes by means of Clausing's equation. The difference of curves for the flows through an iron and through a copper tube are probably based on the solution of the diffusion of mercury into the depth of the

Card 2/3

The Separation of Isotopes in a Non-Steady Molecular Flow 56-2-9/51

walls of the copper tube. Thus it was shown that the different sorption times lead to a separation of isotopes. This phenomenon must be considered a source of error in exact mass-spectroscopic measurements. There are 3 figures and 2 references, 1 of which is Slavic.

SUBMITTED: August 30, 1957

AVAILABLE: Library of Congress

1. Isotopes-Separation 2. Mercury vapor-Molecular flow-Applications 3. Mercury isotopes-Measurement

Card 3/3

SAFRONOV, B.G.; CHURAYEV, V.A.; AZOVSKIY, Yu.S.; ASEYEV, G.G.;
VOYTSENYA, V.S.

[Distribution of a variable magnetic field in solid single-loop coils] Raspredelenie peremennogo magnitnogo polia v massivnykh odnovitkovykh katushkakh. Khar'kov, Fiziko-tekhn. in-t, 1960. 106-133 p. (MIRA 17:1)

SAFRONOV, B.G.; ASEYEV, G.G.; AZOVSKIY, Yu.S.

[Propagation of successive shock waves] Rasprostranenie posledovatel'nykh udarnykh voln. Khar'kov, Fiziko-tekhn. in-t AN USSR, 1960. 64-88 p. (MIRA 17:3)

SINEL'NIKOV, K.D.; SAFRONOV, B.G.; AZOVSKIY, Yu.S.; ASEYEV, G.G.;
VOYTSENYA, V.S.

[Magnetic properties of a plasma behind the front of a strong shock wave] Izuchenie magnitnykh svoistv plazmy za frontom sil'noi udarnoi volny. Khar'kov, Fiziko-tekhn. in-t AN USSR, 1960. 89-105 p. (MIRA 17:1)

SINEL'NIKOV, K.D.; SAFRONOV, B.G.; AZOVSKIY, Yu.S.; ASEYEV, G.G.;
VOYTSENYA, V.S.

Studying the magnetic properties of a plasma behind a strong shock wave front. Zhur.tekh.fiz. 31 no.8:893-898 Ag '61.
(MIRA 14:8)

1. Fiziko-tekhnicheskiy institut AN USSR, Khar'kov.
(Plasma (Ionized gases)--Magnetic properties)
(Shock waves)

10.1410

24.6711

27169
S/057/61/031/009/009/019
B104/B102

AUTHORS: Safronov, B. G., Aseyev, G. G., and Azovskiy, Yu. S.

TITLE: Propagation of shock-wave series

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 31, no. 9, 1961, 1066-1072

TEXT: The authors studied the propagation of shock waves in hydrogen, air, and argon, which were produced in highly ionized discharges performing attenuated oscillations. The semiperiods of the shock-wave series were found to be equal to those of the discharge current. For generating shock waves, they used T sources (R. G. Fowler et al., Phys. Rev., 82, 879, 1951; A. C. Kolb, Phys. Rev., 107, 345, 1957; A. C. Kolb, Phys. Rev., 107, 1197, 1957) and K sources (V. Josephson, J. Appl. Phys., 29, 30, 1958). The parameters of the discharge circuits were:

T source	2.0 microfarads	4.9 µsec	0.30 microhenries	6-12 kv
K source	2.0 "	2.0 "	0.05 "	20 kv

The shock waves were recorded with an ФЭУ-19 (FEU-19) photomultiplier whose signal was amplified and fed to an ОК-17 (OK-17) oscilloscope.

Card 1/3

27169

Propagation of shock-wave series S/057/61/031/009/009/019
B104/B102

With a small distance of the multiplier from the source, 5-7 light maxima could be found. The time interval between these peaks was equal to the semiperiod of the discharge. Measurements showed that the initial velocity of the shock-wave series was equal to that of the discharge current; the initial velocity of the first shock wave was higher than that of the second one, and so forth. The first shock waves from T and K sources satisfy Kolb's relations up to a distance of $l \leqslant 40$ cm of the wave front from the source. At $l > 40$ cm the shock-wave retardation increases due to the effect of the walls. Starting from a certain distance from the source, the second and following shock waves propagate faster than the first one. This is explained by the fact that the following shock waves may propagate through a heated and ionized gas. Measurements showed that shock waves propagated faster in an ionized gas than in a neutral one. Mach numbers up to 80 were attained; ionization was estimated to be some 10 %, temperature $\sim 10^4$ $^{\circ}$K. The authors thank K. D. Sinel'nikov for a discussion of results. There are 7 figures, 2 tables, and 6 references: 1 Soviet and 5 non-Soviet.

Card 2/3

27169
S/057/61/031/009/009/019
B104/B102

Propagation of shock-wave series

ASSOCIATION: Fiziko-tekhnicheskiy institut AN USSR Khar'kov (Physicotechnical Institute AS UkrSSR, Khar'kov)

SUBMITTED: August 11, 1960

Card 3/3

S/781/62/000/000/019/036

AUTHORS: Sinel'nikov, K. D., Safronov B. G., Azovskiy Yu. S., Aseyev, G. G., Voytsenya V. S.

TITLE: Study of magnetic properties of a plasma behind the front of a strong shock wave

SOURCE: Fizika plazmy i problemy upravlyayemogo termoyadernogo sinteza; doklady I konferentsii po fizike plazmy i probleme upravlyayemykh termoyadernykh reaktsiy. Fiz.-tekh. inst. AN Ukr. SSR. Kiev, Izd-vo AN Ukr. SSR, 1962. 86-92

TEXT: The scope of the investigation is similar to that of Shao, Resler, and Kantorowitz (ref. 3: J. Appl. Phys. 26, 95 (1955), except that the shock waves under consideration are stronger (with Mach number closto 50 rather than the upper limit of 17 in the cited paper). The experimental setup consisted of a shock tube with conical shock-wave source made of organic glass, placed in a solenoid which could be so set as to make the shock wave travel in a homogeneous or inhomogeneous magnetic field. The change in magnetic field connected with the passage of the shock wave was registered with a magnetic probe, and the velocity of the shock

Card 1/3

wave in the probe region was registered with two photomultipliers whose entrance slits were spaced 5-6 cm apart. The principal measurements were made in air at an initial pressure 0.2 mm Hg, It was found during the course of the experiments that the magnetic probes had a higher resolution than the photomultipliers.

Figures are presented showing oscillograms of the probe and photomultiplier signals, the dependence of the probe signal amplitude on the magnetic wave and on the velocity of the shock wave, and the emf induced in the probe when a plasma disc moves in a magnetic field relative to the probe.

The principal conclusions are that in the case of strong shock waves the distribution of the conductivity behind the front of the shock wave cannot be determined with the aid of this procedure, inasmuch as the half-width of the conductivity zone behind the front of the shock wave greatly decreases with increasing Mach number. In the case of the work of Shao et al, this procedure can be used, but the results must be approached with caution, since only the eddy currents were taken into account and thermal diamagnetism was completely ignored. Certain preliminary experiments were also made to determine the polarization of the plasma behind the front of the shock wave, showing that when a shock wave

Study of magnetic properties ... S/781/62/000/000/019/036

moves in a homogeneous transverse field it becomes polarized in a plane perpendicular to the magnetic field. Attempts to measure the polarization voltage as a function of the magnetic field intensity have led to values only half as large as the theoretical voltage, and the reason for this is not yet clear. There are seven figures and four references, all to Western literature.

Card 3/3

ACCESSION NR: AT4036060 S/2781/63/000/003/0206/0211

AUTHORS: Aseyev, G. G.; Voytsenya, V. S.; Konovalov, V. G.

TITLE: Experiments on the compression of a plasma by a rapidly growing magnetic field

SOURCE: Konferentsiya po fizike plazmy* i problemam upravlyayemogo termoyadernogo sinteza. 3d, Kharkov, 1962. Fizika plazmy* i problemy* upravlyayemogo termoyadernogo sinteza (Plasma physics and problems of controlled thermonuclear synthesis); doklady* konferentsii, no. 3. Kiev, Izd-vo AN UkrSSR, 1963, 206-211

TOPIC TAGS: plasma compression, plasma magnetic field interaction, plasma pinch, discharge plasma, plasma decay, plasma instability

ABSTRACT: Experiments were set up to ascertain the causes of the slow displacement of a compressed plasma pinch from the system axis towards the wall of the discharge tube and towards the gap in the

Card 1/42

ACCESSION NR: AT4036060

magnetic coil, during the first half cycle of a Θ-pinch discharge. The experimental setup consisted of a quartz tube (40--60 mm dia) containing helium at a pressure 6.7--13.3 n/m^2. The coil current was produced by a 30μF capacitor bank discharged at 50 kV. The gas was preliminarily excited with a high-frequency generator at 40 Mc and 200 W. The results have established experimentally that the displacement of the plasma pinch in the first half cycle is due to nonaxiality of the discharge tube and the magnetic coil, although a final clarification of the nature of the displacement of the pinch is still necessary. In some experiments a conducting screen was placed on the outside of the discharge tube, and it was shown that the screen reduces the influx of impurities into the discharge. An initial magnetic field bucking the external field causes the pinch stability to deteriorate at approximately the first maximum of the compressing magnetic field. Orig. art. has: 5 figures and 1 table.

ASSOCIATION: None

Card 2/~~4~~2

L 24054-66 EWT(1)/EWP(m)/EWT(m)/EWA(d)/EWA(h) JD/WW/GS/AT/GM
ACC NR: AT6008856

SOURCE CODE: UR/0000/65/000/000/0161/0165

AUTHOR: Aseyev, G. G.; Konovalov, V. G.

81
B+1

ORG: none

TITLE: Antecedent photoionization of helium in a gas discharge shock tube
27

SOURCE: AN UkrSSR. Magnitnyye lovushki (Magnetic traps). Kiev, Naukova dumka, 1965, 161-165

TOPIC TAGS: UV radiation, photoionization, gas discharge plasma, shock tube, helium

ABSTRACT: An electrostatic probe, microwave techniques and photomultiplier techniques are used for experimentally showing that preliminary ionization of helium of the order of 1% observed in a shock tube at initial pressures of (3-6)·10^{-1} mm Hg is due to photoionization by ultraviolet radiation from the discharge (λ<1100 angstrom). One of the direct proofs of this hypothesis is the presence of helium ions before arrival of the shock wave and the plasma discharge at a given point of the shock tube. The experimental method and equipment are described in detail. Analysis of the experimental data shows that a plasma with a density of 10^{13} cm^{-3} is generated 30 cm from the coil. This plasma is generated before arrival of the discharge plasma simultaneously throughout the length of the tube. If the diaphragm of the probe is closed with a sheet of lithium fluoride, the antecedent signal disappears completely. The experi-

Cord 1/2

2

~~L 24054-66~~

ACC NR: AT6008356

O

mental results show that the observed antecedent ionization of helium is due to photoionization by the hard ultraviolet discharge. Orig. art. has: 4 figures.

SUB CODE: 20/ SUBM DATE: 20Oct65/ ORIG REF: 004/ OTH REF: 005

Card 2/2 dda

L 43798-66 EWT(1)/EWP(m) WW/GD

ACC NR: AT6020416 (N) SOURCE CODE: UR/0000/65/000/000/0181/0187

22

B+1

AUTHOR: Aseyev, G. G.; Konovalov, V. G.

ORG: none

TITLE: Some effects observed during the collision of shock waves and plasmoids in a shock tube with induction discharge

SOURCE: AN UkrSSR. Issledovaniye plazmennykh sgustkov (Study of plasma clusters). Kiev, Naukovo dumka, 1965, 181-187

TOPIC TAGS: plasmoid, plasma shock wave, plasma velocity, shock wave interaction, SHOCK TUBE

ABSTRACT: Properties of strong colliding shock waves generated in quartz tubes by an electrodeless discharge were studied. The discharges formed shocks in argon and xenon gases. At higher Mach numbers, the shock front was quite plain and practically coincided with the plasma formed during the discharge due to short relaxation times. The shock wave velocity was found to decrease with initial pressure increase while the plasma velocity was found to have a maximum. This shows that some of the gas is ejected from the shock-forming region while further current flow produces the plasma behind the shock. Another set of experiments showed that the plasma was carrying currents that induced compressing fields which strongly affect the after-shock plasma and its behavior during the collision. This phenomenon should be considered in studies of

Card 1/2

ASEYEV, G.M.

ASEYEV, G.M.; SLAVOLYUBOVA, K.F.

[Hardening the body in sun, air and water; data for lectures]
Zakalivanie solntsem, vozdukhom i vodoi; materialy dlia lektsii.
Moskva, Institut sanitarnogo prosveshcheniia ministerstva zdravookhraneniia SSSR, 1955. 61 p. (MIRA 11:2)
(PHYSICAL FITNESS) (CLIMATOLOGY, MEDICAL)

ASEYEV, G.M.; TOKAR', Sh.Z.

[Physical culture and sports among working youth; materials for health education] Fizicheskaia kul'tura i sport sredi rabochei molodezhi; materialy dlia sanitarno-prosvetitel'noi ratoty. Moskva, 1956. 60 p. (MIRA 11:3)

(PHYSICAL EDUCATION AND TRAINING)

ASEYEV, Georgiy Mikhaylovich, vrach; NARUSOVA, I.Ya., red.; SHPEKTOROVA, Ye.I., tekhn. red.

[Control your weight] Borites' s polnotoi. Moskva, Izd-vo "Fizkul'tura i sport," 1961. 46 p. (MIRA 15:3)
(Corpulence) (Reducing exercises)

ASEYEV, Georgiy Mikhaylovich; ZOTOV, Veniamin Alekseyevich;
KUKOLEVSKIY, G.M., red.; ROMANOVA, Z.A., tekhn. red.

[Medical control of the physical education of students]
Vrachebnyi kontrol' za fizicheskim vospitaniem studentov.
Moskva, Medgiz, 1963. 193 p. (MIRA 16:7)
(SPORTS MEDICINE) (COLLEGE SPORTS)

ASEYEV, Georgiy Mikhaylovich; NORKINA, Taisiya Yefimovna;
FLEROVSKIY, Yevgeniy Alekseyevich; NARUSOVA, I.Ya., red.;
SHPEKTOROVA, Ye.I., tekhn. red.

[Physical culture is the enemy of diseases] Fizkul'tura -
vrag boleznei. Moskva, Izd-vo "Fizkul'tura i sport," 1963.
44 p. (MIRA 16:7)
(SPORTS MEDICINE)

[illegible]

ASEYEV, G.V., inzh.

Tasks for further improvements in power installations in the merchant marine and fishing fleets. Sudostroenie 23 no.11:19-22 N '57.
(MIRA 11:1)

(Boilers, Marine) (Steam turbines)

ASEYEV, G.V.

SOV/122-58-6-34/37

Scientific and Engineering Conference on Design and Construction Problems of Sea-going Merchant Vessels, Vest. Mash., No.6-pp. 83-84-1958

others, and elucidated the major problems requiring discussion. N.G. Bykov, Director of Administration of the Ministry of the Merchant Marine concerned with orders and supervision of ship-building construction, read a paper on sea-going merchant vessels intended for design and construction during the coming period, finishing in 1965. The basic types of ships earmarked for construction were listed, including tankers of 25 000 and 17 000-ton capacity, dry cargo vessels, timber transport, passenger vessels for scheduled line duties and others. He also discussed the technical and service requirements applicable to new ships. Special attention was devoted to the choice of propulsion machinery, the need to achieve familiarisation with the production of powerful slow-running diesel engines and the development of the manufacture of gas and steam turbines. G.V. Aseyev, Director of the Scientific Research Institute, reported on modern types of propulsion machinery for sea-going ships, their technical and economic suitability, effectiveness and development trends. The application of propulsion machinery of any kind, was guided at present primarily by production possibilities and only in the second

Card2/5

Scientific and Engineering Conference on Design and Construction Problems of Sea-going Merchant Vessels

place by the service and profitability requirements of the ordering organisations, the operating units of the Merchant Marine. Ships to be constructed in the next few years should be powered by diesel engines of 9 000 - 10 000 hp and by steam turbines of greater power. Further development of propulsion machinery must follow the evolution of gas-turbine installation with free piston gas generators and with combustion chambers and also the trend of creation of atomic power installations. N.I. Ivachenko, chief designer of the Tsentral'nyy nauchno-issledovatel'skiy dizel'nyy institut (Central Scientific Research Institute for Diesel Engines) devoted his lecture to modern ships' diesel installations at home and abroad. Diesel-powered ships are taking up an increasing proportion in recent shipbuilding. In 1955, their share amounted to 60% of all shipbuilding, in 1956 to 58.5% in tonnage and 83.5% in numbers. The improvement of diesel engines and the use of gas turbine supercharging for slow-running diesel engines have made it possible to create engines of 15 000 hp. Diesel engines of 20 000 hp and more are under construction.

ASEYEV, I.

1. ASEEV, I.

2. USSR (600)

4. Coal Mines and Mining

7. Let's leave all the rock in the mine, Mast.ugl. 2 no. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

ASEYEV, K. K.

USSR/Metallurgy - Cast Iron, Technology May 52

"Smelting of Cast Iron Using Anthracite," K. K. Aseyev, Engr, Shebekino Mach-Bldg Plant

"Litey Proizvod" No 5, p 23

PA 228T94

Briefly describes melting practice when anthracite is used in cupola furnace partially or entirely replacing coke. States that increase in vol and pressure of air blast is required. Application of quality anthracite under proper conditions of melting procedure provides for obtaining liquid cast iron with temp of 1,380-1,440° without air preheating.

228T94

Bed charge decreases with increase of anthracite percentage in it, article notes.

228T94

ASEYEV, K.K.; KRYMSKIY, D.M.; MISHCHENKO, N.I.

Casting iron pistons. Lit.proizv. no. 5:25-27 Ag '54. (MLRA 7:8)
(Pistons) (Iron founding)

ASEYEV, K.K.

Casting cast-iron connecting rods for engines. Lit.proizv. no.9:
29 D'54.
(Founding) (MLRA 8:2)

ASEYEV, L.V., kandidat meditsinskikh nauk (Leningrad, ul. Lebedeva, 37.
Kafedra patologicheskoy anatomii)

Complications and causes of death following transpleural surgery of the lungs, esophagus, and stomach. Vest. khir. 74 no.5:63-68 Jl-Ag '54.
(MLRA 7:10)

1. Iz kafedry patologicheskoy anatomii (nach. prof. A.N.Chistovich) Voyenno-meditsinskoy akademii im. S.M.Kirova.

(LUNGS, surgery,
  transpleural, postop. comp. & death)
(ESOPHAGUS, surgery,
  same)
(STOMACH, surgery,
  same)
(DEATH, SUDDEN,
  in transpleural esophageal, gastric & pulm. surg.)

EXCERPTA MEDICA Sec 5 Vol. 10/9 Pathology Sept 57

2581. ASIEV L. V. Changes in the great saphenous vein after venesection in patients who underwent major operations (Russian text) ARKH. PATOL. 1957, 19/3 (45-51) Tables 3

This study was undertaken in order to clarify the aetiology and pathogenesis of post-operative thrombo-embolism. The great saphenous vein was examined at autopsy in 40 cases of postoperative death from various causes in patients who had had a venesection of this vessel. Three of the patients died within 2 weeks after the operation as a result of pulmonary embolism following thrombosis at the site of venesection. In 9 patients who died within 48 hours after the operation few or no inflammatory changes at the site of venesection were observed. Phlebothrombosis or thrombophlebitis at the site of venesection was present in those patients who died within 3-14 days after operation; in those who had died at a later period the inflammatory changes had subsided, but thrombosis had sometimes progressed in proximal direction. In a number of cases phlebothrombosis at the site of venesection was probably primarily due to general circulatory insufficiency rather than to local trauma.

Wilson - Dearborn, Mich. (V,9,18)

ASEYEV, L.V., kand.med.nauk

Causes of mortality from lung surgery [with summary in English].
Vest.khir. 79 no.9:62-70 S '57. (MIRA 10:11)

1. Iz gospital'noy khirurgicheskoy kliniki (nach. - prof. I.S. Kolesnikov) Voyenno-meditsinskoy ordena Lenina akademii im. S.M. Kirova. Adres avtora: Leningrad, K-9, ul. Lebedeva, d.37-a kafedra patologicheskoy anatomii.
(LUNGS, surg.
causes of death invarious kinds of lung surg.)

VERKUTOV, A.N.; ANTIPENKO, V.S.; ASEYEV, L.V.

Homotransplantation of the skin as a method for the acceleration of wound healing. Khirurgiia 36 no. 5:106-113 My '60. (MIRA 14:1)
(SKIN GRAFTING) (WOUNDS—TREATMENT)

ASEYEV, L.V., dotsent; BURMISTROV, M.I., kand.med.nauk

Rare complication following fistulography - iodolipodol embolism of vessels fo the greater circulation. Vest.khir. no.1:130-132 '62. (MIRA 15:1)

1. Iz 1-y khirurgicheskoy kliniki usovershenstvovaniya vrachey (nach. - prof. P.A. Kupriyanov) i kafedry patologicheskoy anatomii (nach. - prof. A.N. Chistovich) Voyenno-meditsinskoy ordena Lenina akademii im. S.M. Kirova.
(CONTRAST MEDIA) (FISTULA) (RADIOGRAPHY)

ASEYEV, N

Postroyka korpusa stal'nogo sudna (Hull construction of a steel ship) Moskva, Vodtransizdat, 1953. 294 p. illus., diagrs., tables.

N/5
743.4
.A8

ASEYEV, P.

"Means and methods of defense against atomic weapons." Reviewed by P.Aseev. Sov.mor.15 no.15:16 Ag '55. (MIRA 9:4)
(Atomic warfare)

ASEYEV, P.A., inzhener distantsii.

Introduce a regular schedule for track sections. Put' i put. khoz. no.5:43 My '57. (MLRA 10:6)

1. St. Solntsevo Yuzhnoy dorogi.
(Railroads--Maintenance and repair)

BUROV, A.G.; ASEYEV, P.A.; KONYAKHIN, Yu.Ya., inzh.; BAKHMATSKIY, P.A.; KOZYKIN, V.A.; KUZNETSOV, M.G., inzh.-mekhanik

Creative work of efficiency promoters. Put' i put. khoz. 9 no.11:23-24 '65. (MIRA 18:11)

1. Nachal'nik Vargashinskoy distantsii Yuzhno-Ural'skoy dorogi (for Burov). 2. Stantsiya Solntsevo, Yuzhnoy dorogi (for Aseyev). 3. Stantsiya Gruzskoye, Yugo-Zapadnoy dorogi (for Bakhmatskiy). 4. Nachal'nik Nizhneudinskoy distantsii Vostochno-Sibirskoy dorogi (for Kozykin). 5. Stantsiya Prokop'yevsk, Zapadno-Sibirskoy dorogi (for Kuznetsov).

ASEYEV, P.I.

PA 33/49T54

USSR/Engineering Nov 48
Ships - Construction
Ships - Construction Materials

"Building Seagoing Barges in Prefabricated Sections," P. Aseyev, Engr, 5 pp

"Morskoy Flot" Vol VIII, No 11

Sectional prefabrication is attaining wide use in USSR shipbuilding technology. Details construction principles of 43- and 68-meter barges, which are being constructed of type ST-3 steel. Several photographs and sketches show various stages of construction.

[redacted] 33/49T54

ASEYEV, P.I.

[Building of hulls on steel ships] Postroika korpusa stal'nogo sudna. Moskva, Gos. izd-vo vodnogo transporta, 1953 . 294 p. (MLRA 7:7)
(Ships, Iron and steel) (Hulls(Naval architecture))

ASEYEV, Petr Illarionovich; BUTORIN, I.M., retsenzent; RESHIN, Yu.G., redaktor; VITASHKINA, S.A., redaktor izdatel'stva; KRASNAYA, A.K., tekhnicheskiy redaktor

[Building hulls of steel ships] Postroika korpusa stal'nogo sudna. Izd. 2-oe, perer. i dop. Moskva, Izd-vo "Rechnoi transport," 1957. 331 p. (MIRA 10:10)
(Hulls (Naval architecture))

ASEYEV, P.I., inzh.; LIBEL', Ye.P., inzh.

Experience in using scale scrive boards in scrive board operations. Sudostroenie 24 no.5:49-52 My '58. (MIRA 11:6)
(Shipbuilding)

ASEYEV, P.V.

28

PROCESSES AND PROPERTIES INDEX

Extraction of sugar from final molasses. P. V. Aseev. *Zhur. Sakharnoi Prom.* 4, 59-63(1930).—The method is based on pptn. of the sugar from molasses in the form of Ba saccharate. V. E. Baikow

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

ASEYEV, Ye.T., inzh.; KANEVSKIY, A.G., inzh.

Analysis of network scheduling at the stage of the elaboration of labor reserves. Transp. stroi. 15 no.11:35-36 N '65.

(MIRA 18:11)

ASEYEVA, R.M.; ASEYEV, Yu.G.; BERLIN, A.A.; KASATOCHKIN, V.I.

Spectral study of the products of oxidation of high-molecular conjugate polyenes. Zhur. strukt. khim. 6 no.1:47-52 Ja-F '65. (MIRA 18:12)

1. Institut khimicheskoy fiziki AN SSSR. Submitted November 19, 1963.

BERLIN, A.A.; ASEYEVA, R.M.; SMUTKINA, Z.S.; KASATOCHKIN, V.I.

Kinetics of thermal degradation of chlorine-containing carbochain polymers. Izv. AN SSSR Ser. khim. no.11:1974-1979 N '64 (MIRA 18:1)

1. Institut khimicheskoy fiziki AN SSSR.

RECHMENSKIY, I.N.; ASEYEV, V.B.; MONAKHOV, V.V.; LYNDA, A.S., red.;
SHCHEPTEVA, T.A., tekhn.red.

[Programs of pedagogical institutes; elements of machinery for physics and mathematics faculties. Majors: mathematics and mechanical drawing] Programmy pedagogicheskikh institutov; osnovy mashinovedeniia dlia fiziko-matematicheskikh fakul'tetov. Spetsial'nost' - matematika i cherchenie. Moskva, Gos.uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1957. 7 p. (MIRA 11:3)

1. Russia (1917- R.S.F.S.R.) Glavnoye upravleniye vysshikh i srednikh pedagogicheskikh uchebnykh zavedenii.
(Machinery)

ASEYEV, V.G.

Monotony of work in conveyor operations. Vop. psikhol. 7 no.6:
37-54 N-D '61.
(MIRA 15:1)

1. Institut psikhologii Akademii pedagogicheskikh nauk RSFSR, Moskva.
(Work)

ASEYEV, V.G.

In the Psychology Section of the Philosophical Institute of the Academy of Sciences of the U.S.S.R. Vop. psikhol no.3:188-189 My-Je '63. (MIRA 17:2)

PROKOF'YEV, V.V.; AFANAS'YEV, A.F.; PEKHTEREV, N.P.; ASEYEV, V.I.,
retsenzent

[Descriptive geometry] Nachertatel'naia geometriia. Moskva, Mosk. khimiko-tekhnolog. in-t im. D.I.Mendeleeva, 1963. 169 p. (MIRA 17:5)

ASEYEV, Ye., prepodavatel'

Visual aids for the study of a.c. generator units. Avt. transp. 39 no.5:50 My '61. (MIRA 14:5)

1. Rostovskiy uchebnyy kombinat.
(Audio-visual equipment)
(Automobile drivers--Education and training)

ASEYEV, YE.N.

STRUNGE, B.N., inzhener; ASEYEV, Ye.N., inzhener.

Powerful engine for main line diesel locomotives. Zhel.dor.transp. 39 no.8:36-40 Ag '57. (MLRA 10:9)

(Diesel locomotives)

ASEYEV, Ye.N., inzh.; ZHEBROVSKIY, A.F., inzh.(Khar'kov)

Two-cycle diesel engine operating on natural gas. Zhel.
dor.transp. 41 no.12:33-36 D '59. (MIRA 13:4)
(Diesel locomotives)

ASEYEV, Ye.N.; EPSHTEYN, A.S.; CHERNOMORDIK, B.M., kand. tekhn. nauk, retsenzent; MELEYEV, A.S., inzh., red.; BULATOV, S.I., red.izd-va; UVAROVA, A.F., tekhn. red.

[Design and calculations for free-piston gas generators]Konstruirovanie i raschet bezval'nykh generatorov gaza. Moskva, Mashgiz, 1962. 354 p. (MIRA 15:12)
(Gas producers) (Turbomachines)

VONSYATSKIY, V.A.; ASEYEV, Yu.G.; KASATOCHKIN, V.I.; BERLIN, A.A.

Spectral study of polyphenylene and its block copolymers with p-diethynylbenzene. Izv. AN SSSR. Ser.khim. no.9:1654-1658 S '63.
(MIRA 16:9)

1. Institut khimicheskoy fiziki AN SSSR i Institut goryuchikh iskopayemykh.
(Phenylene group) (Benzene) (Spectrum analysis)

ACCESSION NR: AP3003517 S/0020/63/151/001/0125/0126

AUTHOR: Kasatochkin, V. I.; Yegorova, O. I.; Aseyev, Yu. G.

TITLE: On the atomic structure of carbon in polyyne form

SOURCE: AN SSSR. Doklady, v. 151, no. 1, 1963, 125-126 and Fig. 2 on insert following p. 126

TOPIC TAGS: acetylene, acetylene condensation, copper acetylide oxidation, polyynes, polyyne carbon chain, cumulene, cumulene carbon chain, polyene, polyene carbon chain, conjugation, x-ray diffraction, infrared spectra, cross-linking, ordered structure, nonordered structure

ABSTRACT: A study is made of the x-ray diffraction patterns and infrared spectra of carbon products of acetylene condensation prepared at the Institut elementoorganicheskikh soyedineniy (Institute of Organoelemental Compounds). The products were obtained by the reaction of acetylene with an aqueous bivalent Cu solution and the subsequent oxidation of the resulting polymeric cupric

Card 1/3

ACCESSION NR: AP3003517

acetylide with potassium ferricyanide. The following is the mechanism postulated for the formation of the polyynes:
$4HC=CH + 2\,Cu = HC=C-C=CH + 2HC=CCu + 4H$;
$4HC=C-C=CH + 2Cu = HC=C-C=C-C=C-C=CH + CH=C-C=CCu + 4H$.
The x-ray pattern shows two discrete sharp interference bands which correspond to Bragg's periods of 3.90 and 2.62 Å, respectively. The first band is attributed to intermolecular interference in a bundle of parallel, closely packed linear polyyne chains. The period corresponding to the second band, which may be attributed to intramolecular interference in the carbon chain, was somewhat greater than the sum of the triple and single carbon-carbon bond lengths in a biacetylene molecule. The presence in the x-ray pattern of a background of independent scattering and a wide interference halo revealed a slightly ordered portion of the carbon chains with an average intermolecular distance of approximately 4.0 Å. The infrared spectra of the products contained absorption bands characteristic both of polyyne and cumulene structures in the carbon chain. The polyyne structure was revealed by the strong absorption band of the monosubstituted triple bond system at $2100\ cm^{-1}$ and the

Card 2/3

ACCESSION NR: AP3003517

disubstituted triple bond system at 2200 cm^{-1}. Bands characteristic of triple bonds, corresponding to ≡ CH at the end of the carbon chain were also present. The structure of cumulene carbon chains revealed a strong absorption band at 1950 cm^{-1} and a weak band at 1060 cm^{-1}, both corresponding to cumulated double bonds. An additional wide band with a maximum at 1640 cm^{-1} was attributed to "cross-linking" of some polyyne chains to form a three-dimensional structure of the polyene type. It was concluded that the polymeric carbon products were linear macromolecules with a polyyne and (in part) cumulene structure brought together in molecular bundles of parallel chains. Part of the macromolecules are cross-linked to form a nonordered three-dimensional conjugated polyene structure. Orig. art. has: 2 figures.

ASSOCIATION: Institut goryuchikh iskopayemy*kh (Institute of Mineral Fuels)

SUBMITTED: 01Mar63 DATE ACQ: 30Jul63 ENCL: 00

SUB CODE: 00 NO REF SOV: 002 OTHER: 003

Card 3/3

KASATOCHKIN, V.I.; SLADKOV, A.M.; ASEYEV, Yu.G.; KUDRYAVTSEV, Yu.P.;
YEGOROVA, O.I.; KORSHAK, V.V.

Infrared spectra of polyynes. Dokl. AN SSSR 153 no.2:346-349
N '63. (MIRA 16:12)

1. Institut goryuchikh iskopayemykh AN SSSR i Institut elementoorganicheskikh soyedineniy AN SSSR. 2. Chlen-korrespondent AN SSSR (for Korshak).

BERLIN, A.A.; CHERKASHINA, L.G.; FRANKEVICH, Ye.L.; BALABANOV, Ye.M.;
ASEYEV, Yu.G.

Polymers with a conjugation system. Part 1: Synthesis and study of the electrophysical properties of polymeric phthalocyanines. Vysokom. soed. 6 no. 5:832-837 My '64.
(MIRA 17:6)

1. Institut khimicheskoy fiziki AN SSSR.

ACCESSION NR: AP4041172 S/0062/64/000/006/1132/1132

AUTHOR: Sherle, A. I.; Aseyev, Yu. G.; Frankevich, Ye. L.; Berlin, A. A.; Kasatochkin, V. I.

TITLE: Formation of a tetracyanoethylene chelate polymer

SOURCE: AN SSSR. Izv. Seriya khimicheskaya, no. 6, 1964, 1132

TOPIC TAGS: tetracyanoethylene, organic semiconductor, semiconducting polymer, chelate polymer, copper tetraacetylenide

ABSTRACT: Copper tetraacetylenide (I) has been prepared, identified, and its semiconducting properties studied. Salt I was obtained in acetonitrile and with lower yield in nitrobenzene. Identification was made by elemental analysis and UV and IR spectroscopy. At below 100C, electrical conductivity (σ) in vacuum was described by

$$\sigma = 10^{-0.6} \exp(-5670/RT), \quad \sigma_{300k} = 10^{-4.7} \text{ ohm}^{-1} \text{ cm}^{-1}.$$

At higher temperatures σ drops irreversibly and after heating to 150C becomes $\sigma = 10^{0.8} \exp(11900/RT)$, $\sigma_{300k} = 10^{-7.8}$ ohm^{-1} cm^{-1}.

Card 1/2

ACCESSION NR: AP4041172

If I is heated in the presence of tetracyanoethylene a new compound (II) is formed which unlike I is insoluble in acetonitrile and tetrahydrofuron. Compound II is highly soluble in H_2SO_4 and can be precipitated from it with water. IR spectroscopy suggests that II is a chelate polymer. The work was carried out at the Institute of Chemical Physics of the Academy of Sciences USSR.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics, Academy of Sciences SSSR)

SUBMITTED: 24Mar64

ENCL: 00

SUB CODE: OC, SS

NO REF SOV: 001

OTHER: 001

ATD PRESS: 3043

Card 2/2

ACCESSION NR: AP4037280 S/0190/64/006/005/0832/0837

AUTHOR: Berlin, A. A.; Cherkashina, L. G.; Frankevich, Ye. L.; Balabanov, Ye. M.; Aseyev, Yu. G.

TITLE: Polymers with a conjugated system. I. Synthesis and investigation of the electrophysical properties of polymeric phthalocyanines

SOURCE: Vy*sokomolekulyarny*ye soyedineniya, v. 6, no. 5, 1964, 832-837

TOPIC TAGS: organic semiconductor, semiconductor polymer, phthalocyanine polymer

ABSTRACT: The effect of oxygen-containing groups and the effect of branching on the electrical properties of phthalocyanine polymers have been studied. This was considered of interest because previously prepared phthalocyanines based on aromatic tetracarboxylic acids

Card 1/3

ACCESSION NR: AP4037280

showed semiconducting and catalytic properties. The polymers in this study were synthesized by reacting 1,2,4,5-tetracyanobenzene (TCB) or TCB and phthalonitrile (PN) with copper powder or Cu_2Cl_2 in the presence of urea at 300C. PN was added to control both the degree of branching and the content of nitrile end groups, which were subsequently converted to oxygen-containing groups by hydrolysis with H_2SO_4. The electrical conductivity at 300K for the TCB polymers was 10^{-5} to 10^{-2} ohm^{-1} cm^{-1} and the activation energy was 6—2 kcal/mol. These figures for phthalocyanine polymers prepared earlier from pyromelitic acid were 10^{-4} ohm^{-1} cm^{-1} and 4.2 kcal/mol. For the polymers from TCB and PN which contain oxygen groups, the conductivity was 10^{-5} ohm^{-1} cm^{-1} and $10^{-2.6}$ ohm^{-1} cm^{-1} for reprecipitated and nonreprecipitated samples, respectively. The thermal stability of the phthalocyanine polymers with oxygen-containing groups was higher than that of the nitrile-group-containing analogs (300—350 C versus 250 C). This research was done at the Institute of Chemical Physics, Academy of Sciences SSSR. Orig. art. has: 3 figures, 2 tables, and 2 formulas.

Card 2/3